

**Application No.:** 10/828,793  
**Filing Date.:** April 20, 2004

## REMARKS

Claim 6 is amended by this paper and new Claims 35-42 are added. Claims 1-5 and 19 were previously canceled, and Claims 9, 15 and 22-34 are withdrawn as stated in the Office Action dated February 11, 2008. Claims 7-8, 10-14, 16-18 and 20-21 are unchanged. Claims 6-8, 10-14, 16-18, 20-21, and 35-42 are under examination in the application. Reconsideration and allowance of the claims in light of the present remarks is respectfully requested.

### Examiner Interview

Applicant and Applicant's representative wish to express their appreciation for the availability of Examiner Shubo Zhou to conduct an interview on June 11, 2008, to discuss various matters related to the case. Applicant believes that substantial progress was made as a result of the interview, and believes that this amendment addresses the Examiner's concerns expressed therein.

### Discussion of the Rejections under 35 U.S.C. § 101

Applicant has reviewed and where appropriate amended the claims. Applicant respectfully requests reconsideration and withdrawal of the rejection under 38 U.S.C. § 101.

### Examiner's Statement of Rejection of Claims 6-8, 10-14, 16-18 and 20-21

In the Office Action, Claims 6-8, 10-14, 16-18 and 20-21 are rejected under 35 U.S.C. § 103(a) as being obvious over Iliff, (U.S. Patent No. 5,935,060) in view of Akers et al. (US 2004/0017474). In rejecting Claim 6, the Examiner states that the system disclosed by Iliff "comprises at least a plurality of disease objects and a plurality of symptom objects. See at least Fig. 3B and Fig. 10, and columns 1-3. Further, in the system of Iliff, the script engine will execute an individual script which is linked to specific data. Thus, each object is only to see the script of another object, not the data." *O.A. at page 6, para. 4*. The Iliff portion cited by the Examiner states:

List-Based processing is a method of diagnosing diseases that works by arranging diseases, symptoms, and questions into a set of nested Disease, Symptom, and Question (DSQ) lists in such a way that the lists can be processed to generate a dialogue with the patient. *Iliff, col. 1, line 66 – col. 2, line 3*.

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A List-Based Processing system organizes medical knowledge into formal, structured lists or arrays, and then applies a special algorithm to those lists to automatically select the next question. *Id. at col. 2, ll. 9-12.*

[T]here is a computerized diagnostic method, comprising the steps of providing to a computer a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions. *Id. at col. 2, ll. 15-18.*

Each MDS [script] contains the data and commands needed to interview a patient for a specific medical condition and to output a diagnosis. *Id. at col. 3, ll. 55-58.*

In rejecting Claim 6, the Examiner cites Figure 3b. Figure 3b shows “a list of diseases 324, a list of symptoms 326, and a list of questions 328.” *Id. at col. 14, ll. 49-51.*

In rejecting Claim 6, the Examiner cites Figure 10. Figure 10 describes “a portion of the lists utilized during run-time operation of the DSP list script engine.” *Id. at col. 23, ll. 32-34.* Specifically with regard to the disease and symptom lists, Figure 10 discloses that:

[T]he DSQ list script engine 500 accesses the master disease list 324. The diseases in the master disease list are copied to a disease temp list 550. ... [S]ymptoms from the master symptom list 326 of the current disease are selectively copied to the symptom temp list 552. *Id. at col. 23, ll. 40-46.*

#### Discussion of the Rejections under 35 U.S.C. § 103(a)

In the Office Action, the Examiner notes that Iliff discloses a medical diagnosis computer system comprising various data and scripts, and software for using the system and data for diagnosis. *O.A., page 6, para. 3.* The Examiner interprets the disclosed combination of list data and scripts for manipulating the list data as “reading on the ‘object’ recited in the instant claims.” *Id.* Applicant respectfully submits that the Examiner has mischaracterized the combination of lists of disease names, symptom strings, and question strings, with scripts that access these lists, as “objects” as objects would be understood by one skilled in the art of computer programming.

In object-oriented programming, the mere combination of data and associated scripts for manipulating that data does not render that combination an object. As discussed at paragraph [0066] of the specification, fundamentally, “an object is a combination of data and processes that manipulate that data.” However, an object has essential properties beyond this simple combination. The example discussed at paragraph [0066] continues: “The data are said to be ‘encapsulated,’ meaning that they are hidden, so that a user of the object only sees processes that can be invoked.” In the example discussed at paragraph [0072], the specification recites:

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An important property of an object is that the object's data can be hidden behind the object's processes, so that the outside user of the object can only see and use object processes that can be invoked to access the data. The object is said to "hide" data ...

In contrast, lists of disease names, symptoms, and questions are simply collections of string literal constants, constants that are not associated with any encapsulating object. Nowhere does Iliff teach or suggest "a digital storage device for storing the plurality of objects and the corresponding data and processes for each object, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data." Using a script engine to execute individual scripts linked to specific data may mean, as the Examiner noted, that each script "is only to see the script of another object, not the data," (*O.A. page 6, para. 4*), but a script's lack of access to the data of other scripts is an inconsequential side-effect of a script-based implementation, and does not represent data hiding or encapsulation as would be understood by one skilled in the art. Iliff's disclosure of a combination of lists of data and scripts to manipulate that data does not disclose either an object or encapsulation. Therefore, Applicant respectfully requests the withdrawal of all claim rejections and prompt allowance of the claims.

The Office Action admits that Iliff fails to teach or suggest all the features recited in Claim 6. (See Office Action, page 7.) But, the Office Action attempts to combine Iliff with Akers to arrive at the features of Claim 6. In particular, the Examiner apparently relies upon Akers for allegedly teaching encapsulation of data. (See Akers at paragraphs [0096] and [0107].) Applicant respectfully submits that Akers cannot be properly combined with Iliff because Akers does not qualify as prior art for at least these teachings.

In particular, Akers was filed on Feb. 19, 2003. The Examiner appears to rely on the filing dates of related Application No. 09/170,509 (now U.S. Patent 6,597,392), filed on October 13, 1998, which claims priority to provisional Application No. 60/061,761, filed on October 14, 1997, or on related Application No. 09/851,745 (now U.S. Patent Application Publication 2002/0169637), filed on May 9, 2001. However, in both instances, the Akers reference is a continuation-in-part from these applications. That is, new matter, including the description of encapsulation and Figures 5 and 7 (of U.S. Patent Application Publication 2004/0017474), was added in Akers when it was filed on Feb. 19, 2003. Applicant respectfully submits that Application No. 09/170,509 does not teach or suggest the features relied upon by the Examiner, since it did not

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have any corresponding discussion of encapsulation. Therefore, at best, Akers may only be entitled to a filing date of May 9, 2001.

Since the present application has an effective filing date of February 14, 2001, Akers does not qualify as prior art. Applicant respectfully requests reconsideration and withdrawal of the rejection.

#### Discussion of the Rejections based on Double Patenting

Claims 6-8, 10-14, 16-18 and 20-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 6-8, 20-30 and 49-50 of copending U.S. Application No. 09/785,044. Applicant respectfully submits that the claims of the present application have been amended to be different than the claims in the copending application.

Furthermore, Claims 6-8, 10-14, 16-18 and 20-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-14 of U.S. Patent No. 6,527,713 in view of Akers. However, Akers does not qualify as prior art as discussed above. Therefore, Applicant respectfully requests withdrawal of the rejection.

#### Dependent Claims

Although Applicant has not addressed all the issues of the dependent claims, Applicant respectfully submits that Applicant does not necessarily agree with the characterization and assessments of the dependent claims made by the Examiner, and Applicant believes that each claim is patentable on its own merits. The dependent claims are dependent either directly or indirectly on one of the above-discussed independent claims. Applicant respectfully submits that pursuant to 35 U.S.C. § 112, ¶4, the dependent claims incorporate by reference all the limitations of the claim to which they refer and include their own patentable features, and are therefore in condition for allowance. Therefore, Applicant respectfully requests the withdrawal of all claim rejections and prompt allowance of the claims.

#### New Claims

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Applicant has added new dependent Claims 35-42. Claims 35-36 are supported by at least page 12, lines 5-8 of paragraph [0070], and page 79, paragraph [0308] of the specification as filed. Claim 37 is supported by at least paragraphs [0077] to [0107]. Claim 38 is supported by at least paragraphs [0079] (last two lines) and [0095] (last three lines). Claims 39-40 are supported by at least paragraphs [0074] and [0079] (third line). Claims 41-42 are supported by at least paragraphs [0075] and [0085] (third line).

#### No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

#### Conclusion

In light of the above amendments and remarks, reconsideration and withdrawal of the outstanding rejections are specifically requested. Applicant respectfully submits that the claims of the above-identified application are in condition for allowance. However, if the Examiner finds any impediment to allowing all claims that can be resolved by telephone, the Examiner is respectfully requested to call the undersigned.


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Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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